

Claims

1. A data switch having a plurality of ingress/egress ports and for transmitting data packets including a destination address, the data switch having address table construction means for generating a table containing  
5 associations between ports of the switch and MAC addresses of any devices connected to the switch via those ports, the address table construction means being operable to construct said table in respect of all but a first one of the ports.
2. A data switch according to claim 1 in which the address table  
10 construction means is further operable to construct said table in respect of all of the ports, according to the setting of a control register.
3. A data switch for transmitting data packets including a destination address, the data switch comprising:  
a first ingress/egress port and a plurality of second ingress/egress  
15 ports;  
table storage means for storing a table containing associations between the second ports of the switch and MAC addresses of any devices connected to the switch via the second ports;  
a switching fabric, and  
20 a control unit for controlling the switching fabric,  
the control unit being arranged, upon receiving a data packet from any of the second ports having a destination address which is not stored in the table, to control the switching fabric to transmit the data packet to the first ingress/egress port.

4. A data switch according to any preceding claim which is connected to a communication network via the first port.
5. A switch according to any preceding claim having at least one port other than the first port arranged to receive and transmit voice signals.
5. 6. A voice communication device for supporting communication with a second device, the communication device comprising:
  - a microphone,
  - a speaker,
  - circuitry for transforming sound signals received from the microphone
  - 10 into data packets and for transforming data packets into control signals for the speaker, and
  - a data switch according to any of claims 1 to 4 connected to the circuitry.
7. A voice communication device according to claim 6 further including
- 15 means for connecting one or more of the ports other than the first port to devices which each have a MAC address.
8. A voice communication device which is connected to a communications network via the first port of the switch.
9. A method of operating a data switch comprising a plurality of
- 20 ingress/egress ports, the method including:
  - generating a table containing associations between ports of the switch and MAC addresses of any devices connected to the switch via those ports,
  - the generation of the table including constructing said table in respect of all but a first one of the ports.

10. A method of operating a data switch for switching data packets including a destination address, the data switch comprising a first ingress/egress port, a plurality of second ingress/egress ports, and a memory storing a table containing associations between second ports of the switch and MAC addresses of any devices connected to the switch via the second ports,
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the method including, upon receiving a data packet from any of the second ports containing a destination address which is not stored in the table, transmitting the data packet to the first ingress/egress port.